



GEOTECHNICAL &
ENVIRONMENTAL
SERVICES, INC.

PROVIDING

- Geotechnical Engineering
- Construction Materials Testing
- Environmental Site Assessments
- Drilling Services

March 9, 2000
Project No. 97664V3

Ms. Brenda Pohlmann
Nevada Division of Environmental Protection
555 E. Washington, Suite 4300
Las Vegas, NV 89101-1049

RE: Results of monthly surface water sampling of the Las Vegas Wash at the Northshore Road bridge.

Dear Ms. Pohlmann:

Per your request, Geotechnical & Environmental Services, Inc. (GES) obtained a surface water sample from the Las Vegas wash on February 28, 2000 near the Northshore Road Bridge. We sent this sample, under chain-of-custody protocol, to NEL Laboratories (NEL) for laboratory analysis of perchlorate. NEL's analysis revealed a perchlorate concentration of 720 micrograms per Liter ($\mu\text{g/L}$). The NEL report is included with this letter, along with the Perchlorate Summary Table for 2000.

In addition to the sample we collected and submitted to NEL, a split sample was collected per the request of Mr. Kevin Mayer, with the US Environmental Protection Agency (USEPA). This split sample was collected at the same time and in the same manner as the sample submitted to NEL, and was sent, under chain-of-custody protocol, to the USEPA Laboratory in Richmond, California.

Our services were performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable engineering firms in this or similar localities. No other warranty, either express or implied, is included

7560 W. Sahara Ave., Suite 101 Las Vegas, NV 89117
(702) 365-1001 • Fax (702) 341-7120
www.gesnevada.com


or intended in this report. We appreciate this opportunity to provide our services. If you have any questions regarding these results, please feel free to call us at 365-1001.

Sincerely,

Geotechnical & Environmental Services, Inc.



Daniel C. Burns, C.E.M. *
1692 (Expires 10/07/2001)
Project Manager



Gregory P. DeSart, P.E., C.E.M.
1172 (Expires 12/22/2000)
President

* "I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances."

dlr

Enc: 1999 Perchlorate Summary Table
NEL Analytical Report

Dist: 1 faxed to addressee at 486-2863
1 original mailed to addressee
cc: fax to Jeff Gibson, American Pacific Corporation
cc: mail to Kevin Mayer, USEPA SFD 72, 75 Hawthorne Street, San Francisco, CA 94105
cc: to project file 97664V3

**Las Vegas Wash at Northshore Road Bridge
2000 Summary of Perchlorate Concentrations**

Date Sampled	Perchlorate (µg/L)
1/27/00	569
2/28/00	720

NEL LABORATORIESReno • Las Vegas
Phoenix • So. CaliforniaLas Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: Geotechnical & Env. Serv.
7560 West Sahara Ave. #101
Las Vegas, NV 89117
ATTN: Dan Burns

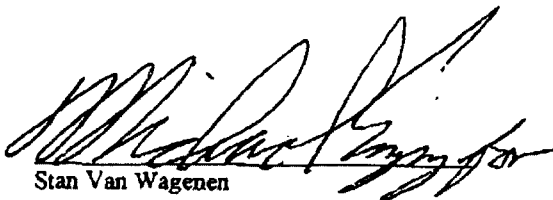
PROJECT NAME: FPF
PROJECT NUMBER: 97664 V3

NEL ORDER ID: L0002262

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 2/28/00.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.


Stan Van Wagenen
Laboratory Manager

3/8/00
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: Geotechnical & Env. Serv.
PROJECT ID: PPF
PROJECT #: 97664 V3

CLIENT ID: North Shore Bridge
DATE SAMPLED: 2/28/00
NEL SAMPLE ID: L0002262-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	720	80.	20	CA DHSM - IC	µg/L	3/3/00

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF
PROJECT #: 97664 V3
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 000303CLO4B-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	ND	4	1	CA DHSM - IC	µg/L	3/3/00

D.F. - Dilution Factor

ND - Not Detected

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Phoenix • So. California

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GES

Don Burns

Company:

Attention:

Address: 2560 W Sahara Ave, #101

Las Vegas, NV 89117

Phone Number: 702-365-1001

Fax Number: 702-341-7120

Billing Address:

Expected Due Date

Requested Turnaround: ☒ 5-day ☐ 2-day ☐ 1-day ☐ Other

Time/Date Sampled Customer Sample Identification N.E.L. Identification

09/02/2000 North Shore Bridge 01

of Containers Matrix (Box #1) Preservative (Box #2)

Perchlorate

Remarks

CHAIN OF CUSTODY

NEL Work Order: 10002262

Project Name: FPE	Project Number: 97664 V3
Purchase Order Number: 1602	Sampled By: R. Cooke

Custody Seal intact? Y N ☒ None Temp. 10°C

Condition when received Good

Signature

Box #1	DW - Drinking Water WW - Waste Water OL - Organic Liquid	SQ - Solid AQ - Aqueous A - Air
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Box #2	A - HCl B - HNO ₃ C - H ₂ SO ₄ D - NaOH	E - Ice Only F - Other G - Not Preserved
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Requested by (Print)	(Signature)	Date/Time	Received by (Print)	(Signature)	Date/Time
Richard Cooke	Richard Cooke	09/28/00 10:15	T. Spurr	T. Spurr	2-28-00/10:15
3					

The liability of NEL Laboratories Inc. is limited strictly to the price of sample analysis for those samples received in good condition by NEL. NEL is not responsible for loss, damage, resampling costs and/or qualified data related to samples not received in good condition, including adequate sample volume and number of containers. Customer signature of this CofC constitutes a purchase order for NEL to perform work and constitutes acceptance of all NEL Standard Terms and Conditions. Signature also constitutes acceptance of NEL Standard Test Prices for all services ordered here on, except those specified otherwise via an NEL Declaration for Testing Services in effect at the time of sample receipt. NEL turnaround times are measured in regular working days. Samples received at the laboratory after 16:30 will be considered received on the next working day. Commitment of laboratory to the requested turnaround time will be confirmed via Sample Confirmation transmitted to the fax number provided above.

LETTER OF TRANSMITTAL

GEOTECHNICAL & ENVIRONMENTAL SERVICES, INC.

7560 West Sahara Avenue, Suite 101
Las Vegas, Nevada 89117
(702) 365-1001 (702) 341-7120 (FAX)

TO: USEPA SFD 72 DATE: March 9, 2000
75 Hawthorne St PROJECT:
San Francisco CA 94105
ATTN: Mr Kevin Mayer GES PROJECT # 97664 V3

WE ARE FORWARDING THE ITEMS LISTED BELOW VIA:

 MESSENGER PICK UP x U.S. MAIL "NEXT DAY"

<u>COPIES</u>	<u>DESCRIPTION</u>
<u>1</u>	<u>Results of monthly surface water sampling of Wash at Northshore Rd Bridge</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

THESE ITEMS ARE SENT FOR: REVIEW COMMENT APPROVAL USE
 SIGN & RETURN OTHER:

REMARKS:

THIS MATERIAL IS SENT BY: Daniel C. Burns, C.E.M.

PLEASE SIGN AND RETURN ONE COPY OF TRANSMITTAL.

RECEIVED BY: TIME: DATE:

OTHER DISTRIBUTION:

If enclosures are not as noted, please notify us at once.